



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,489	10/27/2003	Yoshitomo Tokumoto	K06-163166M/TBS	3135
21254	7590	06/28/2004	EXAMINER	
MCGINN & GIBB, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817			MILLER, TAKISHA S	
			ART UNIT	PAPER NUMBER
			2855	

DATE MAILED: 06/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

un

Office Action Summary	Application No. 10/693,489	Applicant(s) TOKUMOTO, YOSHITOMO	
	Examiner Takisha Miller	Art Unit 2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
4a) Of the above claim(s) 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>01262004</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-5, drawn to rotation detection device, classified in class 73, subclass 862.335.
 - II. Claim 6, drawn to method of manufacturing a detection device, classified in class 29, subclass 592+.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions of Group I and Group II are related as process of making and product made.

The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the rotation detection device can be manufactured utilizing various engineering methods.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Sean McGinn on June 24, 2004 a provisional election was made with out traverse to prosecute the invention of Group I, claims 1-5.

Affirmation of this election must be made by applicant in replying to this Office action. Claim 6 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Art Unit: 2855

Specification

5. The title of the invention is not proper in light of the election/restriction. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "Rotation angle detecting device and torque detecting device".

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakamura et al. (2002/0020229)(hereinafter Nakamura).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

a. With respect to claims 1 and 5, Nakamura teaches a rotation angle detecting device (71A) comprising a target (72) including a magnetic member (73) connected integrally rotatably with a rotary member (102/103) and a plurality of magnetic sensors

Art Unit: 2855

(Fig.17) arranged to confront the magnetic member (73) for outputting signals according to a rotation of the rotary member (102/103)(¶ 0084, lines 1-13)(Fig.17), wherein the magnetic sensors (Fig.17) respectively include semiconductor MR elements (121-124), and the semiconductor MR elements are formed over and integrally with a common cell of a semiconductor wafer (23)(Fig.3).

b. With respect to claim 2, Nakamura teaches a rotation angle detecting device (71A) wherein the semiconductor MR elements (121-124) are arranged over the common cell and at circumferential positions different from each other with respect to the rotary member (102/103)(Fig.25).

c. With respect to claim 3, Nakamura teaches a rotation angle detecting device (71A) wherein the semiconductor MR elements (121-124) are fixed integrally to a substrate (23) through an adhesive layer (¶ 0056, lines 6-8).

d. With respect to claim 4, Nakamura teaches a torque detecting device (101) comprising a rotation member including a first rotary shaft (102) and a second rotary shaft (103) connected coaxially to the first rotary shaft (102); rotation angle detection devices (71A, 71B) provided to the first (102) and second (103) rotary shafts, respectively, each of the rotation angle detecting devices (71A, 71B) including, a target (72) including a magnetic member (73) connected integrally rotatably with the corresponding first (102) or second (103) rotary shaft, and a plurality of magnetic sensors (Fig.17) arranged to confront the magnetic member (73) for outputting signal according to a rotation of the corresponding first (102) or second (103) rotation shaft (¶ 0084, lines 1-13); wherein the magnetic sensors (Fig.17) respectively include semiconductor MR

Art Unit: 2855


elements (121-124), and the semiconductor MR elements (121-124) are formed over and integrally with a common cell of a semiconductor wafer (23)(Fig.3) and a torque detecting unit for detecting a torque to be applied to the rotary member based on signals outputted from the corresponding rotation angle detecting devices (71A,71B)(¶ 0093, lines 5-9; ¶ 0094, lines 9-16).

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Takisha Miller whose telephone number is (571) 272-2184. The examiner can normally be reached on Monday - Friday (7:00 am - 3:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



EDWARD LEFKOWITZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800